3. SPECIAL PROJECTS AND REPORTS

A. Strategic Plan for the U.S. Climate Change Science Program (CCSPO)

The U.S. Climate Change Science Program Office (CCSPO) has published the *Strategic Plan for the U.S. Climate Change Science Program* and its companion summary, *The U.S. Climate Change Science Program: Vision for the Program and Highlights of the Scientific Strategic Plan*. Dated July 2003, these documents were prepared by the 13 U.S. federal agencies and departments sponsoring the Climate Change Science Program (CCSP). They describe the mid-term (up to 4 years) and long-term (up to 10 years) plans of the United States to expand its strong support for advances in the development and use of scientific understanding of global climate change. The Strategic Plan calls for the publication of over 20 scientific synthesis and assessment documents during the next 4 years. These products will apply results from ongoing research and observation programs to key questions and topics related to CCSP's five overarching goals.

The guiding vision for the CCSP is: "A nation and the global community empowered with the science-based knowledge to manage the risks and opportunities of change in the climate and related environmental systems." The five principal goals are as follows:

1. Improve knowledge of the Earth's past and present climate and environment, including its natural variability, and improve understanding of the causes of observed variability and change.

2. Improve quantification of the forces bringing about changes in the Earth's climate and related systems.

3. Reduce uncertainty in projections of how the Earth's climate and related systems may change in the future.

4. Understand the sensitivity and adaptability of different natural and managed ecosystems and human systems to climate and related global changes.

5. Explore the uses and identify the limits of evolving knowledge to manage risks and opportunities related to climate variability and change.

By developing information with the aim of achieving these goals, the program will ensure that it addresses the most important climate-related issues. For each of the goals, the CCSP will prepare science-based information resources that support policy discussions and decision-making.

For further information, contact the Climate Change Science Program Office, 1717 Pennsylvania Avenue, NW, Suite 250, Washington, DC 20006, (telephone: (202) 223-6262, electronic mail: information@climatescience.gov) or refer to the CCSP Internet Web Site: http://www.climatescience.gov.

B. Deepwater Port License Application (CG/MARAD)

The Coast Guard (CG), U.S. Department of Homeland Security, and the Maritime Administration (MARAD), U.S. Department of Transportation, have published a Final Environmental Impact Statement (FEIS), dated August 2003, for the Port Pelican LLC Deepwater Port License Application. Port Pelican LLC, an affiliate of ChevronTexaco Corporation, proposes to construct a deepwater port to be known as "Port Pelican" in Vermilion Lease Block 140 on the Outer Continental Shelf in the Gulf of Mexico. The deepwater port would consist of a terminal for receipt, storage, and regasification of liquefied natural gas, a 37 nautical-mile pipeline to carry natural gas from the terminal to existing Tiger Shoal "A" facilities, an associated anchorage area, and a recommended vessel route. Port Pelican would deliver natural gas to the U.S. Gulf Coast using existing gas supply and gathering systems in the Gulf of Mexico and southern Louisiana. The natural gas would then be delivered to shippers using the national pipeline grid through existing interconnections with major interstate and intrastate pipelines.

The Deepwater Port Act of 1974, as amended, establishes a licensing system for ownership, construction, and operation of manmade structures beyond the U.S. territorial sea. All deepwater ports must be licensed. The Deepwater Port Act requires a license applicant to submit detailed plans for its facility to the Secretary of Transportation. The Secretary has delegated the processing of deepwater port applications to the Coast Guard and MARAD. The Coast Guard retains this responsibility with its transfer to the Department of Homeland Security. On June 18, 2003, the Secretary also delegated to the Maritime Administrator his authority to issue, transfer, amend, or reinstate a license for the construction and operation of a deepwater port.

The Deepwater Port Act provides that for all applications, the Secretary of Transportation, in cooperation with other involved federal agencies and departments, will comply with the National Environmental Policy Act (NEPA). Consistent with the Deepwater Port Act, this FEIS evaluates the potential environmental effects associated with construction and operation of the facilities proposed by Port Pelican LLC. The primary purposes of this FEIS are to: (1) provide an environmental analysis sufficient to support the Maritime Administrator's licensing decisions; (2) facilitate a determination of whether the applicant has demonstrated that the deepwater port would be located, constructed, and operated in a manner that represents the best available technology necessary to prevent or minimize adverse effects to the marine environment; (c) aid in the Coast Guard's and MARAD's compliance with NEPA; and (d) facilitate public involvement in the decision-making process. Issues addressed by the FEIS include water quality, biological resources, cultural resources, geological resources, socioeconomics, recreation, transportation, air quality, noise, and reliability and safety.

For further information, contact Cdr. Mark Prescott, Vessel and Facility Operating Standards Division, Office of Operating and Environmental Standards (G-MSO), U.S. Coast Guard, 2100 Second Street, SW, Washington, DC 20593, (telephone: (202) 267-0225, electronic mail: mprescott@comdt.uscg.mil), or Mr. Daniel Yuska, Office of Environmental Activities (MAR-820), Maritime Administration, U.S. Department of Transportation, 400 Seventh Street, SW, Washington, DC 20590, (telephone: (202) 366-0714, electronic mail: daniel.yuska@marad.dot.gov).

C. DOT Strategic Plan for Fiscal Years 2003-2008

The U.S. Department of Transportation (DOT) has issued its Strategic Plan for Fiscal Years 2003-2008. Dated September 2003, this Plan provides a blueprint for achieving DOT's strategic objectives in safety, mobility, global connectivity, environmental stewardship, and security through safer, simpler, and smarter transportation solutions. The Department's top priorities are to keep the traveling public safe, increase their mobility, and ensure that the U.S. transportation system enables the Nation's economic growth and development.

DOT's core mission emphasizes the national interest in safe and efficient transportation. This core mission is valid today and will be valid well into the future even with a global economy where anything can be made anywhere and sold everywhere else around the world. Today, multinational manufacturers source inputs from international suppliers, bring these inputs to production facilities, assemble them, and ship them to customers around the globe. Competitive international trade depends on transportation.

Transportation is an integrated network consisting of publicly and privately owned and operated equipment, infrastructure, and logistics systems. Increasingly, the equipment – cars, trucks, buses, trains, ships, airplanes, launch vehicles, and pipelines – uses information technology to ensure that the person or good being moved arrives at the right place at the right time. Similarly, the infrastructure – highways, port facilities, airports, space launch and reentry sites, and railway and transit stations – is connected by communication and information networks. Improvements in logistics systems sparked by information technology – such as navigation equipment, air traffic control systems, and tracking systems – increase not only the efficiency but also the safety of transportation. The Nation's economic growth and prosperity are dependent upon the synergies of the U.S. transportation and information networks.

The Strategic Plan identifies DOT's mission as the development and administration of policies and programs that contribute to providing fast, safe, efficient, and convenient transportation at the lowest cost consistent with the national objectives of general welfare, economic growth and stability, the security of the United States, and the efficient use and conservation of the resources of the United States.

The Plan's strategic objectives are:

Safety: Enhance public health and safety by working toward the elimination of transportation-related deaths and injuries.

Mobility: Advance accessible and efficient intermodal transportation for the movement of people and goods.

Global Connectivity: Facilitate a more efficient domestic and global transportation system that enables economic growth and development.

Environmental Stewardship: Promote transportation solutions that enhance communities and protect the natural and built environment.

Security: Balance homeland and national security transportation requirements with the mobility needs of the Nation for personal travel and commerce.

For a copy of the U.S. Department of Transportation Strategic Plan for Fiscal Years 2003-2008, refer to DOT's Internet Web Site: http://www.dot.gov.

D. MARAD Strategic Plan for Fiscal Years 2003-2008

The Maritime Administration (MARAD), U.S. Department of Transportation, has issued its Strategic Plan for Fiscal Years 2003-2008. MARAD's mission is to strengthen the U.S. maritime transportation system – including infrastructure, industry, and labor – to meet the economic and security needs of the Nation. MARAD seeks to promote the development and maintenance of an adequate, well-balanced U.S. merchant marine that is sufficient to carry the Nation's domestic waterborne commerce and a substantial portion of its waterborne foreign commerce and is capable of serving as a naval and military auxiliary in time of war or national emergency. MARAD also seeks to ensure that the United States maintains adequate shipbuilding and repair services, efficient ports, effective intermodal water and land connections, and reserve shipping capacity for use in time of national emergency. Dated September 2003, the Strategic Plan lays out MARAD's course of action and accomplishments in three strategic areas: commercial mobility, national security, and environment.

Commercial Mobility: The commercial mobility strategic objective primarily addresses congestion reduction. Solutions to prevent congestion of the existing transportation system and to alleviate impediments will require a systemic approach to moving freight as those who use the network demand more reliable door-to-door freight services. MARAD will explore ways to develop the technology and infrastructure that will improve the use of the marine transportation system to alleviate congestion, e.g., establishment of a domestic short sea shipping system, and will also improve waterside-landside connection points. Additionally, MARAD will continue to formulate and present the U.S. position on international maritime issues and actively participate in international activities to assist the U.S. maritime industry in achieving equitable and competitive maritime transportation operations worldwide.

National Security: MARAD recognizes that the U.S. transportation system must remain a vital link for mobilizing the Nation's armed forces for military contingencies and for supporting civilian emergency response. The national security strategic objective addresses these needs by continuing to support the transportation requirements of the U.S. Department of Defense and through initiatives to make U.S. ports and the container shipping system more secure. In addition, MARAD understands the urgency in securing U.S. port facilities and waterborne commerce from terrorist attack. With funding from the U.S. Department of Homeland Security, MARAD has implemented port security grant activities that play a major role in the improvement of U.S. port security.

Environment: MARAD expects to focus considerable attention on three critical maritime environment issues: ship disposal, marine air emissions and energy use, and ballast water management. MARAD will lessen the risk of environmental contamination posed by MARAD-owned transportation assets, particularly the obsolete vessels in the National Defense Reserve Fleet. The Agency will dispose of these ships in an environmentally responsible manner and assure that they do not contaminate the environment as they await disposal. At the same time, MARAD will implement President Bush's Executive Orders on environmental stewardship and leadership in environmental management. MARAD will formalize environmental considerations in its operations and in its partnerships with other agencies and private stakeholders in order to streamline processes that lead to environmentally friendly transportation improvements.

For a copy of MARAD's Strategic Plan for Fiscal Years 2003-2008, refer to MARAD's Internet Web Site: http://www.marad.dot.gov.

E. Climate Change Science and Transportation (DOT)

The U.S. Department of Transportation (DOT) has issued five reports that address climate change science and transportation. The five reports are as follows:

1. Greenhouse Gas Reduction through State and Local Transportation Planning – Evaluates how states and local areas might contribute to greenhouse gas (GHG) emission reductions through transportation planning. Seven case studies focus on the broad transportation planning process, strategies and other selected actions, and GHG emission reductions accomplished or projected. Considers both transportation planning by state departments of transportation, metropolitan planning organizations, and local transportation agencies, and energy, environmental, or land use planning by other state and local agencies that address climate change and transportation policies, investments, and strategies.

2. Fuel Options for Reducing Greenhouse Emissions from Motor Vehicles – An assessment of the potential of gasoline substitutes to reduce emissions of carbon dioxide and other greenhouse gases by automobiles and light-duty trucks. Reductions in future GHG emissions are estimated under specific assumptions about growth in light-duty vehicle travel and the replacement of gasoline by various other fuels, both in the near term (10 years) and over the longer term (25 years).

3. Modeling of Advanced Technology Vehicles – Reviews some currently used methods for representing advanced technology vehicles in engineering and market simulation models, and considers the potential for simple generalized methodologies. Focuses on light-duty hybrid electric vehicles as an illustrative case and also considers possible extension to other vehicle types (e.g., aircraft, buses, locomotives, and marine vessels).

4. Passenger Ferries, Air Quality, and Greenhouse Gases – Evaluates the potential greenhouse gas benefits achievable through better integration of passenger ferries with land transportation systems, considering ferry technology and fueling options. The San Francisco

Bay Area was analyzed as a point of reference and as a potential basis for consideration of other areas where passenger ferries might be effective.

5. The Potential Impacts of Climate Change on Transportation – Summary and 18 discussion papers from the October 2002 workshop exploring the potential impacts of climate change on transportation systems and services. The workshop brought together professional, regional, and national transportation stakeholders, as well as experts in climate change, the environment, planning, and energy, to provide input on research priorities for the DOT Center for Climate Change and Environmental Forecasting (CCCEF).

The CCCEF serves as the DOT focal point for expertise on transportation and climate change. Through strategic research, policy analysis, partnerships, and outreach, the Center helps develop comprehensive and multi-modal approaches to reduce transportation-related greenhouse gases and to mitigate the effects of global climate change on the transportation network. The Center is a DOT-wide partnership of eight operating administrations and the Office of the Secretary. The operating administrations include the Federal Aviation Administration, Federal Highway Administration, Federal Railroad Administration, Federal Transit Administration, Maritime Administration, National Highway Traffic and Safety Administration, Research and Special Programs Administration, and Bureau of Transportation Statistics. The Center researches transportation strategies and technologies to reduce greenhouse gases, identifies facilities that may be at risk from possible effects of climate change and climate anomalies, and develops an array of tools to assess the transportation system's interactions with the global climate.

For further information on the CCCEF or for copies of the listed Center reports, refer to the following DOT Internet Web Site: http://www.dot.gov/climate.

F. Approval of Navigation Equipment for Ships (CG)

The Coast Guard (CG), U.S. Department of Homeland Security, has issued Navigation and Vessel Inspection Circular (NVIC) No. 8-01, Change 1, that revises NVIC 8-01 to amend the guidance provided for a Coast Guard approval program for navigation equipment, as required under chapter V, regulation 18, of the 2000 amendments to the International Convention for the Safety of Life at Sea (SOLAS). Dated November 20, 2003, these changes clarify the approval process for manufacturers seeking Coast Guard approval. Additionally, this amended guidance establishes a process for voyage data recorder (VDR) service providers to obtain Coast Guard approval. SOLAS chapter V requires that SOLAS ships be equipped with type-approved navigation equipment. This requirement was effective with the coming into force of the 2000 SOLAS amendments on July 1, 2002, and it applies to all navigation equipment installed on board a ship subject to SOLAS on or after that date.

The Coast Guard, as the U.S. maritime safety administration under SOLAS, has established an interim approval program using standards, regulations, and processes already in place, in order to meet the U.S. obligations under SOLAS regulation V/18. The Coast Guard intends to develop and implement federal regulations that establish a permanent approval program. Most navigation equipment approved under this NVIC is expected to be covered by a Mutual

Recognition Agreement (MRA) with the European Union, which means that manufacturers obtaining Coast Guard approval of equipment under this NVIC should also be able to obtain approval under the European Marine Equipment Directive at the same time. Conversely, manufacturers obtaining approval of navigation equipment under the Marine Equipment Directive could receive a Coast Guard approval as well.

Navigation equipment approved under this NVIC includes but is not limited to the following: magnetic compass, transmitting magnetic heading device, gyrocompass, speed and distance indicating device, rate of turn indicator, echosounding equipment, heading control system, auto-tracking aid, track control, automatic radar plotting aid (ARPA), chart facilities for shipborne radar, electronic chart display and information system (ECDIS), ECDIS back-up equipment, global positioning system (GPS) equipment, global navigation satellite system (GLONASS) equipment, differential global position system (DGPS) equipment, differential global navigation satellite system (DGLONASS) equipment, Loran-C equipment, integrated bridge system, integrated navigational system, voyage data recorder (VDR), shipborne automatic identification system (AIS), radar reflector, sound reception system, daylight signaling lamp, gyrocompass for high speed craft, automatic steering aid for high speed craft, and night vision equipment for high speed craft.

NVIC 8-01, Change-1, can be accessed at the following Coast Guard Internet Web Site: http://www.uscg.mil/hq/g-m/nvic/index.htm.

G. Maritime Security Guidance (CG)

During December 2003, the Coast Guard (CG), U.S. Department of Homeland Security, issued four Navigation and Vessel Inspection Circulars (NVICs) regarding guidance for implementing the Coast Guard's maritime security regulations (refer to Item 2-C herein) mandated by the Maritime Transportation Security Act of 2002 (MTSA) and related international requirements. These NVICs are as follows:

1. NVIC 3-03 provides guidance for implementing the maritime security requirements mandated by the MTSA for port facilities. The purpose of the regulations found in 33 CFR part 105 is to require security measures for facilities in order to reduce the risk and to mitigate the results of an act that threatens the security of personnel, the facility, and the public. The Coast Guard is responsible for verifying that each affected facility complies with the regulations issued under the MTSA. Facilities that are not specifically regulated under part 105 may be subject to the requirements of 33 CFR part 103. Part 105 requires the owner or operator of each affected facility to comply with an approved Facility Security Plan (FSP) or Alternative Security Program (ASP).

2. NVIC 4-03 provides guidelines for implementing the maritime security regulations mandated by the MTSA and the International Ship and Port Facility Security (ISPS) Code on domestic vessels and vessels not subject to the International Convention for the Safety of Life at Sea (SOLAS). This guidance is needed to conduct verification inspections on affected U.S. vessels that operate domestically, and to issue an International Ship Security Certificate

(ISSC) for vessels to which SOLAS chapter XI-2 applies. This guidance should also be used to verify compliance on any foreign vessel that is not subject SOLAS that must submit a Vessel Security Plan (VSP) for Coast Guard approval. Foreign vessels that are subject to SOLAS should not submit a VSP to the Coast Guard. Applicable regulations are contained in 33 CFR parts 101 and 104 and in the ISPS Code.

3. NVIC 5-03 contains guidance for implementing the maritime security regulations mandated by the MTSA for outer continental shelf (OCS) facilities. Regulations contained in 33 CFR part 106 require the owner or operator of each affected OCS facility to comply with an approved FSP or ASP. The required security measures for OCS facilities are intended to reduce the risk and to mitigate the results of an act that threatens the security of personnel, the OCS facility, the environment, and the public.

4. NVIC 9-02 Change 1 provides guidance to Coast Guard field commanders on the development of Area Maritime Security (AMS) Committees and Area Maritime Security (AMS) Plans; provides guidance on the responsibilities of the Captain of the Port (COTP) acting as the Federal Maritime Security Coordinator (FMSC); provides a common template for the development of AMS Plans; and addresses port security issues that are the shared responsibility of the port stakeholders and AMS Committees.

The ISPS Code was developed to establish a set of international security-oriented regulations relating to vessel and port facilities. The ISPS Code facilitates cooperation among facility operators, vessel crews, vessel owners and operators, classification societies, flag states, and port states. The MTSA authorizes domestic security-oriented regulations similar to the ISPS Code. Like the ISPS Code, regulations issued under the MTSA created cooperation between facility and vessel owners and operators, security personnel, crews, and the U.S. Coast Guard.

Copies of these NVICs can be accessed at the following Coast Guard Internet Web Site: http://www.uscg.mil/hq/g-m/nvic/index.htm.

H. Abandoned Mine Site Reclamation Using Dredged Materials (PDEP)

During December 2003, the Pennsylvania Department of Environmental Protection (PDEP), the New York/New Jersey Clean Ocean and Shore Trust (COAST), and Clean Earth Dredging Technologies Inc. issued a report titled *The Use of Dredged Materials in Abandoned Mine Reclamation: Final Report on the Bark Camp Demonstration Project*. This report documents the successful demonstration of the safe beneficial use of dredged materials to reclaim an abandoned coal mine in central Pennsylvania. The project was undertaken to demonstrate that sediments from standard navigational maintenance dredging operations, containing metals and organic contaminants within regulatory limits, can be processed with alkaline activated coal ash to form a low permeability cementitious fill for mine reclamation with exclusively positive environmental benefits. It also demonstrates the feasibility of this application on a practical basis; the material can be handled, processed, treated, transported, and emplaced while keeping up with the production capacity of dredging operations.

At the Bark Camp Demonstration Project in Clearfield County, Pennsylvania, two rows of dangerous sheer cliffs or highwalls, left behind by surface mining, were eliminated by re-grading land to its approximate original contour. Almost 500,000 cubic yards of dredged materials were mixed with coal ash that, when placed at the site, hardened to form an engineered fill with structural integrity, very low permeability, and resistance to acid attack. This allows rainwater to run off the site instead of mixing with pyritic materials that otherwise would turn the water into polluted acid mine drainage, a leading cause of water pollution. The area has been reseeded and restored to a meadow currently visited by bear, turkey, bobcat, deer, and elk.

In 5 years of monitoring and after more than 100,000 analyses, there were no significant organic or metal contaminants detected other than those present in the general area prior to the project's initiation. Aquatic life also seems to have benefited from the project. The lower sections of Bark Camp Run improved sufficiently to enable the return of aquatic insects. Despite a statewide one meal per week advisory for fish consumption, a survey by the Pennsylvania Fish and Boat Commission (PFBC), 3 years into the project, found trout that spent the Winter in another stream adjacent to the demonstration project to be suitable for unlimited consumption. A single statistically significant finding was a brief, slight elevation in chloride from salt during dredged material placement. The detected levels were within acceptable limits, falling below any water-quality or aquatic-habitat standard and posing no environmental risk.

The majority of dredged materials contain trace substances from agricultural and industrial runoff. These substances have limited the disposal options for dredged materials, particularly in aquatic habitats. Dredged materials are beneficially used to create port facilities and airports, as well as to close landfills and reclaim brownfields. The Bark Camp Demonstration Project shows that dredged material also can be very beneficially used in land reclamation. The PDEP set strict standards for material that could be used on the site and refused any dredged material with more than trace levels of substances of concern. No hazardous waste was used in the reclamation project.

The reclamation of abandoned mine lands is an environmental priority. A copy of the Bark Camp Demonstration Project report, as well as related items, can be found at COAST's Internet Web Site: http://www.nynjcoast.org/AMR/barkcampreport.html.

I. Pollution Prevention Equipment (CG)

On December 31, 2003, (68 FR 75603-75605), the Coast Guard (CG), U.S. Department of Homeland Security, issued a notice of policy stating that the Coast Guard will consider alternative testing standards, including but not limited to standards in the International Maritime Organization (IMO) Marine Environment Protection Committee (MEPC) resolutions MEPC.107(49) and MEPC.108(49), for approval of oil-water separators, bilge monitors, cargo monitors, and bilge alarms and for the designation of laboratories as approved facilities to conduct tests on this pollution prevention equipment (PPE). The standards in these resolutions will come into force internationally in 2005 and will replace existing international standards reflected in current PPE Coast Guard regulations.

For further information, contact Lt. George Grills, Systems Engineering Division, Office of Design and Engineering Standards (G-MSE), U.S. Coast Guard, 2100 Second Street, SW, Washington, DC 20593, (telephone: (202) 267-6640, electronic mail: ggrills@comdt.uscg.mil).